

Jeopardy Assessment
for the Proposed Incidental Taking Authorization
of the Butler's Garter Snake

Lilac Lane and Freistadt Road Bridges over Menomonee River
City of Germantown, Washington County, Wisconsin

Background

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

Jeopardy Assessment

The Lilac Lane bridge will be replaced over the Menomonee River and includes suitable Butler's gartersnake habitat that is part of a significant conservation (Tier 3) site on both sides of the bridge.

The Freistadt bridge will be replaced over the Menomonee River and includes suitable Butler's gartersnake habitat that is part of a significant conservation (Tier 3) site on the south side of the bridge. A minimal conservation site (Tier 1) is located on the north side of the bridge which is covered by the Incidental Take Authorization for Tier 1 Butler's Gartersnake sites.

Both bridges have deteriorated and are considered deficient. The existing structures are single-span concrete bridges. The proposed projects will remove the existing structures and replace them with twin cell reinforced concrete box culverts with retaining wings.

These projects have the potential to cause incidental take of the Butler's gartersnake, although take is being minimized or avoided as follows.

Requirements to avoid or minimize take of the snake

1. Mow the areas to be fenced off (see #2 below). Mowing must be done on a sunny day when the mid-day temperature exceeds 80 degrees. Mowing must be done during the hottest part of the day in order to minimize snake mortality since snakes will likely be under cover to avoid the heat. A qualified individual should walk the area to be mowed immediately before being mowed or in front of the mower and all snakes encountered shall be moved to suitable snake habitat outside of the construction area and the mowed areas.
2. Install snake fencing following mowing. Since snake fencing was not placed prior to snake emergence, fence installation will be required before any of the construction activities begin, to keep snakes from entering the construction areas. Because the likelihood of snake presence is small in these areas, we will not require snake removals to be done. All snakes encountered within the construction areas shall be moved to suitable snake habitat beyond the fences.
3. Upon project completion, all habitat beyond the curbs or gravel shoulders must be restored to good quality suitable snake habitat as defined in the Butler's Gartersnake Conservation Strategy.

These requirements must be met in order for the pending Incidental Take Authorization (ITA) to be issued, except for the post construction restoration of disturbed habitat. These requirements must be fully implemented until the construction projects have been completed for the ITA to remain in effect.

The department has determined that these proposed projects are not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part if the Butler's Gartersnake conservation requirements noted above are strictly adhered to.